

REMARKS

This Amendment amends the specification, rewrites claims 21-24, 26-33 and 44, and adds new claim 46. The separate level inlet and level outlet features of claim 46 are shown in Figs. 1-5. The changes to the specification merely correct obvious typographical errors. Claims 21-46 are pending.

The objection to the specification is respectfully traversed. Fig. 1 does, in fact, illustrate sample output 65, which is located at the right side of the figure. A copy of Fig. 1, with sample output 65 circled, is attached. Reconsideration and withdrawal of the objection to the specification are earnestly requested.

This Amendment overcomes the 35 U.S.C. § 112, second paragraph, rejection of claims 21-45. More particularly, claims 21-24, 26-33 and 44 have been rewritten to eliminate the ambiguities noted in the Official Action:

Claim 21 - The parenthetical phrase "(ABCD)" has been replaced with language specifying that the fluid is transferred from an initial level to a subsequent level, with each level corresponding to at least one processing.

The use of "means" terminology in claim 21 relates to the "component" described in the specification at page 3, lines 27-30. This portion of the specification has been amended to more clearly indicate that each valve consists of at least one means which is a

component which can be deformed to result in closure, directly or indirectly, of a channel. One such means is a flexible film covering all or part of the upper and/or lower side of the test card.

Claim 21 recites the test card has several levels in which liquid flows from an initial level to a subsequent level. These levels are to be considered inside a single reaction line, for example, from level A to level B. This is clearly shown in the specification and the drawings.

Claim 21 recites the liquid flows from an initial level to a subsequent level. It is not believed these levels should be identified by reference to a "vertical" or "horizontal" configuration. The "vertical" or "horizontal" configuration of the reaction lines depends on how the card is held, because the card can be used either vertically or horizontally or in between these positions.

Claim 22 - Claim 22 has been rewritten to more clearly indicate that a fluid in each reaction line flows simultaneously from an initial level of each reaction line to a subsequent level of each reaction line.

The word "substantially" has been deleted from claims 23, 24, 27, 30 and 31.

Claim 23 - Claim 23 has been rewritten to clearly specify the valves are equidistant from one another, as clearly shown in Figs. 1-5.

Claim 26 - Claim 26 has been rewritten to specify that the test card includes a means of keeping a tablet in position such that the tablet is not in contact with the bottom of the compartment. The use of the article "a" (rather than the article "the") does not imply a plurality of compartment bottoms.

Claim 28 - This claim has been rewritten to specify the stanchions are adapted to hold in place a tablet, as clearly supported by page 9, lines 25-27 of the specification.

Claim 29 - Claim 29 has been rewritten by replacing "a regular distance with --a constant distance--.

Claim 32 - Claim 32 now specifies a sample or aliquot of sample is moved within the card for testing purposes.

Claim 33 - Claim 33 has been amended by replacing "the analysis" with --the test--.

Claim 44 - Claim 44 has been amended by replacing "the test card" with --the device--.

Reconsideration and withdrawal of the indefiniteness rejection of claims 21-45 are earnestly requested.

The 35 U.S.C. § 102(b) rejection of claims 21-26, 29-41 and 43-45 over U.S. Patent No. 5,863,801 to Southgate et al. is

respectfully traversed. A feature of the claimed test card, inside which sequential reactions and fluid transfer operations are performed, is an initial level and a subsequent level in each reaction line, with each level corresponding to at least one "processing". One of ordinary skill in the art would understand "processing" to mean at least one reaction step. Yet another feature of the claimed test card is the presence of at least two valves per reaction line.

Southgate et al. fails to disclose the multiple reaction level/processing feature per reaction line of the claimed test card and method. More particularly, the cassette shown in Fig. 9 of Southgate et al. comprises only a single processing level, represented by reaction chamber 1108. All the reactions take place in the same reaction chamber 1108. The different "levels" of Southgate et al. are in fact storage chambers 1113, 1114, 1115 and 1116. No reaction occurs in these storage chambers. Accordingly, Southgate et al. does not disclose or suggest several levels of processing and does not permit a series of reaction chambers. In fact, only the reactants from the storage chambers are provided in series to the single reaction chamber 1108.

In contrast, each reaction occurs in a different chamber in the claimed test method and card. The fluids go from an initial level to another, subsequent level. This is really a transfer in

series, because the fluid will go from level A to level B then to level C then to level D (i.e., from one reaction chamber to another reaction chamber).

Southgate et al. also fails to disclose at least two valves in each reaction line to control fluid transfers from an initial level to a subsequent level. Instead, pressure is used to send beads or buffers from their receptive storage chambers to reaction chamber 1108.

Southgate et al. also fails to disclose a device comprising actuators (one per reaction line) that are at a constant distance from one another. Southgate et al. also fails to disclose a device comprising means for moving the card forward in relation to the actuators, and/or comprising means for moving the actuators forward in relation to the card.

One of ordinary skill in the art would not be motivated to modify the Southgate et al. device and method to arrive at the claimed method because they are conceptually different. Reconsideration and withdrawal of the anticipation rejection of claims 21-26, 29-41 and 43-45 are earnestly requested.

It is believed this application is in condition for allowance. Reconsideration and withdrawal of the objection to the specification and all rejections of claims 21-45, and issuance of a Notice of Allowance directed to claims 21-46, are earnestly

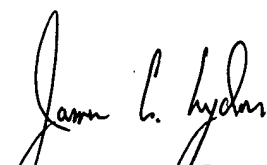
U.S. Appln. S.N. 10/009,848  
AMENDMENT

**PATENT**

requested. The Examiner is urged to telephone the undersigned should he believe any further action is required for allowance.

An Excess Claim Fee Transmittal is attached. It is not believed any additional fee is required for entry and consideration of this Amendment. Nevertheless, the Commissioner is authorized to charge our Deposit Account No. 50-1258 in the amount of any such required fee.

Respectfully submitted,



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Enclosures:

Fig. 1 (marked to show sample outlet 65)  
Excess Claim Fee Transmittal